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(71)Applicant : COLGATE PALMOLIVE CO

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(72)Inventor : CUSH JAMES FRANK JR  
KOLODZIEJ RICHARD M

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(54) ZEOLITE-BASED SPRAY-DRIED DETERGENT COMPOSITION AND PREPARATION THEREOF

(57)Abstract:

PURPOSE: To provide a detergent composition having high solubility and, at the same time, improved particle mechanical strength and integrity which enable the composition to have long term stability and handling.

CONSTITUTION: The detergent composition is prepared by the steps of (a) forming an aqueous crutcher slurry containing (i) at least about 5 wt.% zeolite, (ii) an effective amount of a bead strengthening agent selected from the group consisting of citric acid, a water soluble salt of citric acid, a nitrilotriacetate, a water soluble salt of a nitriloacetate and a mixture thereof and (iii) a supplementary detergent builder excluding components (i) and (ii), (b) spray-drying the crutcher slurry of step (a) to produce spray-dried particles and (c) coating a sufficient amount of one or more anionic, nonionic and cationic surfactant detergent compositions on the spray-dried particles.

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